

REMARKS

Claims 1-20 are currently pending in the application. No claims have been amended herein. Accordingly, following the entry of this paper, claims 1-20 will be pending in the application.

Claims 1, 3-9, 11-15, 17 and 19 have been rejected under 35 U.S.C. §102(e) as being anticipated by U.S. Patent No. 6,091,835 to Smithies et al(hereinafter referred to as "Smithies"). Applicants respectfully traverse the rejection.

With respect to independent claim 1, the claim is directed to a method for electronically signing an electronic transcript, comprising: (a) performing a first hash operation on the electronic transcript to generate a representation of the contents of the electronic transcript; (b) concatenating data to the representation of the contents of the electronic transcript, said data identifying a user; (c) performing a second hash operation on the data concatenated to the representation, the second hash operation generating a representation of the contents of the electronic transcript and the data; (d) providing for the recording and time stamping by a digital notary service of the representation of the contents of the electronic transcript and the data; (e) obtaining a notary record from the digital notary service of the time stamping; (f) digitally signing the notary record; and (g) forming an electronically signed electronic transcript by bundling the digitally signed notary record with the electronic transcript and with the data identifying the user.

Smithies does not teach all of the steps of claim 1 and thus does not anticipate claim 1. Smithies is directed to authentication of electronic signatures in computer-based recording or transcribing systems. Particularly, Smithies is directed to a "ceremony" of affirmation that verifies the identity of a user and verifies that the user actually understands that their electronic signature is a binding affirmation of the recitations of the ceremony and the document being signed, similar to the understanding a person has when physically signing a piece of paper. As described at column 14, lines 5-21, the integrity of the provisions or undertakings of a document,

transaction or statement may be verified using a one-way hash operation. As described in Smithies, a transcript generator module creates a one-way hash corresponding to the contents of the document, transaction or statement. This hash encoding may be compared to a hash encoding of a later copy of the document, transaction or statement to verify that the document, transaction or statement has not been modified since the time of affirmation. Smithies thus teaches performing a hash operation at the time of the affirmation, the result of which is then compared with results of a hash operation performed at a later time. In this manner, it may be verified that the contents of the document, transaction or statement have not been modified since the time of the affirmation.

Smithies contains no teaching of the method as claimed in claim 1. For purposes of discussion the claim may be paraphrased. A first hash is performed on the transcript, and data representative of the user (the electronic signature) is appended (or concated) to the first hash forming a concated/first hash. A second hash operation is performed on the concated/first hash. The various hashes of the present invention can be verified at a later time using conventional methods. Smithies, at most, performs a single hash on the transcript and does not hash the transcript, add the signature, and then rehash the combination for later verification. The second hash identified by Smithies is a hash of the original data, not a hash of a hash. Accordingly, Smithies contains no teaching of "performing a first hash operation on the electronic transcript to generate a representation of the contents of the electronic transcript; concatenating data to the representation of the contents of the electronic transcript, said data identifying a user; performing a second hash operation on the data concatenated to the representation, the second hash operation generating a representation of the contents of the electronic transcript and the data," as required by claim 1.

More specifically, the Examiner, in the Final Office Action, asserts that Smithies teaches such a sequence of operations and specifically refers to column 14, line 33 as teaching "performing a second hash operation on the data concatenated to the representation, the second hash operation generating a representation of the contents of the electronic transcript and the data." The Examiner, in the previous Office Action (dated July 14, 2004) asserted that this operation was taught by Smithies at column 14, lines 14-20. To the contrary, both of these references consistently demonstrate that Smithies does not teach such a second hash operation as

required by the claim. The hash described by Smithies, at column 14 lines 11-13, is “a one-way hash corresponding to the contents of the document, transaction or statement.” This hash may then be verified at the time of authentication as described at column 14, lines 13-16: “[t]his process allows a comparison between a hash encoding of any later copy of the document, transaction or statement and the hash encoding created at the time of affirmation.” This is consistent with the teaching of Smithies at column 14, lines 30-34, which state “the integrity checksum allows any application holding the key originally provided by the client application 12 to confirm the identity of the transcript object 20 **by creating a second hash code of transcript object 20 at a later date and comparing it to the first.**” (emphasis added). Clearly, the Examiner is confused by the liberal use of the term second in Smithies, but the second hash operation of Smithies is directed to verifying the integrity of a transcript at a time after the affirmation of the document by rehashing the data instead of a true second hash operation performed on the first hash as recited by the claims. In other words, the second hash in Smithies simply means second in time and not a second operation performed on the results of the first operation. Therefore, Smithies contains no teaching of concatenating data to a representation of transcript data, or of a second hash operation on data concatenated to the representation, the second hash operation generating a representation of the contents of the electronic transcript and the data, as required by claim 1.

Furthermore, because Smithies contains no teaching of concatenating data or a second hash operation, Smithies also contains no teaching of “providing for the recording and time stamping by a digital notary service of the representation of the contents of the electronic transcript and the data; obtaining a notary record from the digital notary service of the time stamping; digitally signing the notary record; and forming an electronically signed electronic transcript by bundling the digitally signed notary record with the electronic transcript and with the data identifying the user.” Accordingly, Applicants submit that Claim 1 is not anticipated by Smithies and is in condition for allowance. Furthermore, claims 3-6 depend (directly or indirectly) from claim 1. It is submitted that each of these dependent claims is also allowable for at least the same reasons as claim 1.

Independent claim 7 is directed to a computer program product comprising: a computer useable medium and computer readable code embodied on said computer useable medium for

causing electronically signing an electronic transcript by a user, the computer readable code comprising: (a) computer readable program code devices configured to cause the computer to effect the performing a first hash operation on the electronic transcript to generate a representation of the contents of the electronic transcript; (b) computer readable program code devices configured to cause the computer to effect the concatenating data to the representation of the contents of the electronic transcript, said data identifying the user; (c) computer readable program code devices configured to cause the computer to effect the performing a second hash operation on the data concatenated to the representation, the second hash operation generating a representation of the contents of the electronic transcript and the data; (d) computer readable program code devices configured to cause the computer to effect the providing for the recording and time stamping by a digital notary service of the representation of the contents of the electronic transcript and the data; (e) computer readable program code devices configured to cause the computer to effect the obtaining a notary record from the digital notary service of the time stamping; (f) computer readable program code devices configured to cause the computer to effect the digitally signing the notary record; and (g) computer readable program code devices configured to cause the computer to effect the forming of an electronically signed transcript by bundling the digitally signed notary record with the electronic transcript and the data identifying the user.

Smithies does not teach the computer program product as claimed in claim 7. As discussed above, Smithies is directed to authentication of electronic signatures in computer-based recording or transcribing systems, and teaches performing a hash operation at the time of the affirmation, which is then compared with a hash operation performed at a later time when it is desired to verify that the contents of the document have not been modified since the time of the affirmation.

Smithies contains no teaching of “computer readable program code devices configured to cause the computer to effect the performing a first hash operation on the electronic transcript to generate a representation of the contents of the electronic transcript; computer readable program code devices configured to cause the computer to effect the concatenating data to the representation of the contents of the electronic transcript, said data identifying the user;” and “computer readable program code devices configured to cause the computer to effect the

performing a second hash operation on the data concatenated to the representation, the second hash operation generating a representation of the contents of the electronic transcript and the data,” as required by claim 7. Similarly as described above, the hash described by Smithies, at column 14 lines 11-13, and at column 14, line 33 is a one-way hash corresponding to the contents of the document, transaction or statement that may then be authenticated at a later time by comparing a second hash generated at the time of authentication to the hash generated at the time of affirmation. Smithies contains no teaching of computer readable program code devices configured to cause the computer to effect the performing a second hash operation on the data concatenated to the representation, the second hash operation generating a representation of the contents of the electronic transcript and the data, as required by claim 7.

Furthermore, because Smithies contains no teaching of such a second hash operation on the contents of the transcript and the concatenated data, Smithies also contains no teaching of “computer readable program code devices configured to cause the computer to effect the providing for the recording and time stamping by a digital notary service of the representation of the contents of the electronic transcript and the data; computer readable program code devices configured to cause the computer to effect the obtaining a notary record from the digital notary service of the time stamping; computer readable program code devices configured to cause the computer to effect the digitally signing the notary record; and computer readable program code devices configured to cause the computer to effect the forming of an electronically signed transcript by bundling the digitally signed notary record with the electronic transcript and the data identifying the user” as required by the claim. Accordingly, Applicants submit that Claim 7 is not anticipated by Smithies and is therefore in condition for allowance.

Independent claim 8 is directed to a computer data signal embodied in a transmission medium, comprising: (a) a code segment including instructions for performing a first hash operation on an electronic transcript to generate a representation of the contents of the electronic transcript; (b) a code segment including instructions for concatenating data to the representation of the contents of the electronic transcript, said data identifying the user; (c) a code segment including instructions for performing a second hash operation on the data concatenated to the representation, the second hash operation generating a representation of the contents of the electronic transcript and the data; (d) a code segment including instructions for providing for the

recording and time stamping by a digital notary service of the representation of the contents of the electronic transcript and the data; (e) a code segment including instructions for obtaining a notary record from the digital notary service of the time stamping; (f) a code segment including instructions for digitally signing the notary record; and (g) a code segment including instructions for forming an electronically signed electronic transcript including the digitally signed notary record, the electronic transcript, and the data identifying the user.

Smithies does not anticipate the computer program product as claimed in claim 8. As discussed above, Smithies is directed to authentication of electronic signatures in computer-based recording or transcribing systems, with authentication accomplished by performing a hash operation at the time of the affirmation which is compared with a hash operation performed at a later time when it is desired to verify that the contents of the document have not been modified since the time of the affirmation.

Smithies contains no teaching of “a code segment including instructions for performing a first hash operation on an electronic transcript to generate a representation of the contents of the electronic transcript; a code segment including instructions for concatenating data to the representation of the contents of the electronic transcript, said data identifying the user” and “a code segment including instructions for performing a second hash operation on the data concatenated to the representation, the second hash operation generating a representation of the contents of the electronic transcript and the data,” as required by claim 8. Similarly as described above, the hash described by Smithies is one-way hash corresponding to the contents of the document that may then be verified at the time of authentication. Smithies contains no teaching of a second hash operation, or concatenating data as required by the claim.

Furthermore, because Smithies contains no teaching of concatenating data or a second hash operation, Smithies also contains no teaching of “a code segment including instructions for providing for the recording and time stamping by a digital notary service of the representation of the contents of the electronic transcript and the data; a code segment including instructions for obtaining a notary record from the digital notary service of the time stamping; a code segment including instructions for digitally signing the notary record; and a code segment including instructions for forming an electronically signed electronic transcript including the digitally signed notary record, the electronic transcript, and the data identifying the user” as required by

the claim. Accordingly, Applicants submit that Claim 8 is not anticipated by Smithies and is therefore in condition for allowance.

Independent claim 9 is directed to a method for electronically signing an electronic transcript, comprising: (a) performing a first hash operation on a file containing the electronic transcript to generate a representation of the contents of the electronic transcript; (b) concatenating data to the representation of the contents of the electronic transcript, said data identifying a user; (c) performing a second hash operation on the data and the representation, the second hash operation generating a representation of the contents of the electronic transcript and the data; (d) providing for the recording and time stamping by a digital notary service of the representation of the contents of the electronic transcript and the data; (e) obtaining a notary record from the digital notary service of the time stamping; (f) digitally signing the notary record; and (g) forming an electronically signed electronic transcript by bundling the digitally signed notary record with the data identifying the user and with the file containing the electronic transcript.

Smithies does not teach the method as claimed in claim 9. As discussed above, Smithies is directed to authentication of electronic signatures in computer-based recording or transcribing systems. A transcript generator module may create a one-way hash corresponding to the contents of the document, transaction or statement that may be compared to a hash encoding of any later copy of the document to verify that the document has not been modified since the time of affirmation. Smithies thus teaches performing a hash operation at the time of the affirmation, which is then compared with a hash operation performed when it is desired to verify that the contents of the document have not been modified.

Smithies contains no teaching of “performing a first hash operation on a file containing the electronic transcript to generate a representation of the contents of the electronic transcript; concatenating data to the representation of the contents of the electronic transcript, said data identifying a user, and “performing a second hash operation on the data and the representation, the second hash operation generating a representation of the contents of the electronic transcript and the data,” as required by claim 9. Similarly as described above, the hash described by Smithies is one-way hash corresponding to the contents of the document that may then be

verified at the time of authentication. Smithies contains no teaching of a second hash operation, or concatenating data as required by the claim.

Furthermore, because Smithies contains no teaching of concatenating data or a second hash operation, Smithies also contains no teaching of “providing for the recording and time stamping by a digital notary service of the representation of the contents of the electronic transcript and the data; obtaining a notary record from the digital notary service of the time stamping; digitally signing the notary record; and forming an electronically signed electronic transcript by bundling the digitally signed notary record with the data identifying the user and with the file containing the electronic transcript” Accordingly, Applicants submit that Claim 9 is not anticipated by Smithies and is therefore in condition for allowance. Furthermore, claims 11-15 depend (directly or indirectly) from claim 9. It is submitted that each of these dependent claims is also allowable for at least the same reasons as claim 9.

Independent claim 17 is directed to a computer program product comprising: a computer useable medium and computer readable code embodied on said computer useable medium for causing electronically signing an electronic transcript by a user, the computer readable code comprising: (a) computer readable program code devices configured to cause the computer to effect the performing a first hash operation on a file containing the electronic transcript to generate a representation of the contents of the electronic transcript; (b) computer readable program code devices configured to cause the computer to effect the concatenating data to the representation of the contents of the electronic transcript, said data identifying the user; (c) computer readable program code devices configured to cause the computer to effect the performing a second hash operation on the data concatenated to the representation, the second hash operation generating a representation of the contents of the electronic transcript and the data; (d) computer readable program code devices configured to cause the computer to effect the providing for the recording and time stamping by a digital notary service of the representation of the contents of the electronic transcript and the data; (e) computer readable program code devices configured to cause the computer to effect the obtaining a notary record from the digital notary service of the time stamping; (f) computer readable program code devices configured to cause the computer to effect the digitally signing the notary record; and (g) computer readable program code devices configured to cause the computer to effect the forming of an electronically signed

transcript by bundling the digitally signed notary record with the data identifying the user and with the file containing the electronic transcript.

Smithies does not teach the computer program product as claimed in claim 8. As discussed above, Smithies is directed to authentication of electronic signatures in computer-based recording or transcribing systems. A transcript generator module may create a one-way hash corresponding to the contents of the document, transaction or statement that may be compared to a hash encoding of any later copy of the document to verify that the document has not been modified since the time of affirmation. Smithies thus teaches performing a hash operation at the time of the affirmation, which is then compared with a hash operation performed when it is desired to verify that the contents of the document have not been modified.

Smithies contains no teaching of “computer readable program code devices configured to cause the computer to effect the performing a first hash operation on a file containing the electronic transcript to generate a representation of the contents of the electronic transcript; computer readable program code devices configured to cause the computer to effect the concatenating data to the representation of the contents of the electronic transcript, said data identifying the user,” and “computer readable program code devices configured to cause the computer to effect the performing a second hash operation on the data concatenated to the representation, the second hash operation generating a representation of the contents of the electronic transcript and the data,” as required by claim 17. Similarly as described above, the hash described by Smithies is one-way hash corresponding to the contents of the document that may then be verified at the time of authentication. Smithies contains no teaching of a second hash operation, or concatenating data as required by the claim.

Furthermore, because Smithies contains no teaching of concatenating data or a second hash operation, Smithies also contains no teaching of “computer readable program code devices configured to cause the computer to effect the providing for the recording and time stamping by a digital notary service of the representation of the contents of the electronic transcript and the data; computer readable program code devices configured to cause the computer to effect the obtaining a notary record from the digital notary service of the time stamping; computer readable program code devices configured to cause the computer to effect the digitally signing the notary record; and computer readable program code devices configured to cause the computer to effect

the forming of an electronically signed transcript by bundling the digitally signed notary record with the data identifying the user and with the file containing the electronic transcript” as required by the claim. Accordingly, Applicants submit that Claim 17 is not anticipated by Smithies and is therefore in condition for allowance.

Independent claim 19 is directed to computer data signal embodied in a transmission medium, comprising: (a) a code segment including instructions for performing a first hash operation on a file containing an electronic transcript to generate a representation of the contents of the electronic transcript; (b) a code segment including instructions for concatenating data to the representation of the contents of the electronic transcript, said data identifying the user; (c) a code segment including instructions for performing a second hash operation on the data concatenated to the representation, the second hash operation generating a representation of the contents of the electronic transcript and the data; (d) a code segment including instructions for providing for the recording and time stamping by a digital notary service of the representation of the contents of the electronic transcript and the data; (e) a code segment including instructions for obtaining a notary record from the digital notary service of the time stamping; (f) a code segment including instructions for digitally signing the notary record; and (g) a code segment including instructions for forming an electronically signed electronic transcript including the digitally signed notary record, file containing the electronic transcript, and the data identifying the user.

Smithies does not teach the computer program product as claimed in claim 19. As discussed above, Smithies is directed to authentication of electronic signatures in computer-based recording or transcribing systems. A transcript generator module may create a one-way hash corresponding to the contents of the document, transaction or statement that may be compared to a hash encoding of any later copy of the document to verify that the document has not been modified since the time of affirmation. Smithies thus teaches performing a hash operation at the time of the affirmation, which is then compared with a hash operation performed when it is desired to verify that the contents of the document have not been modified.

Smithies contains no teaching of “a code segment including instructions for performing a first hash operation on a file containing an electronic transcript to generate a representation of the contents of the electronic transcript; a code segment including instructions for concatenating data

to the representation of the contents of the electronic transcript, said data identifying the user; a code segment including instructions for performing a second hash operation on the data concatenated to the representation, the second hash operation generating a representation of the contents of the electronic transcript and the data,” as required by claim 19. Similarly as described above, the hash described by Smithies is one-way hash corresponding to the contents of the document that may then be verified at the time of authentication. Smithies contains no teaching of a second hash operation, or concatenating data as required by the claim.

Furthermore, because Smithies contains no teaching of concatenating data or a second hash operation, Smithies also contains no teaching of “a code segment including instructions for providing for the recording and time stamping by a digital notary service of the representation of the contents of the electronic transcript and the data; a code segment including instructions for obtaining a notary record from the digital notary service of the time stamping; a code segment including instructions for digitally signing the notary record; and a code segment including instructions for forming an electronically signed electronic transcript including the digitally signed notary record, file containing the electronic transcript, and the data identifying the user,” as required by the claim. Accordingly, Applicants submit that Claim 19 is not anticipated by Smithies and is therefore in condition for allowance.

Claims 2, 10, 16, 18 and 20 have been rejected under 35 U.S.C. §103(a) as being unpatentable over Smithies patent in view of U.S. Patent No. 6,336,188 to Blake-Wilson et al. (hereinafter referred to as "Blake-Wilson"). Applicants respectfully traverse the rejection.


Claim 2 depends from independent claim 1. Claims 10 and 16 depend from independent claim 9. Claim 18 depends from independent claim 17. Claim 20 depends from independent claim 19. Each of the independent claims has been previously discussed, and because Blake-Wilson does not cure the defects of Smithies, Applicants submit that dependent claims 2, 10, 16, 18, and 20 are each allowable for at least the same reasons as described with respect to the respective independent claims.

No claim related fees are believed to be due with this response. In the event any such fees are due, please debit Deposit Account 08-2623.

The application now appearing to be in form for allowance, reconsideration and allowance thereof is respectfully requested.

Respectfully submitted,

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